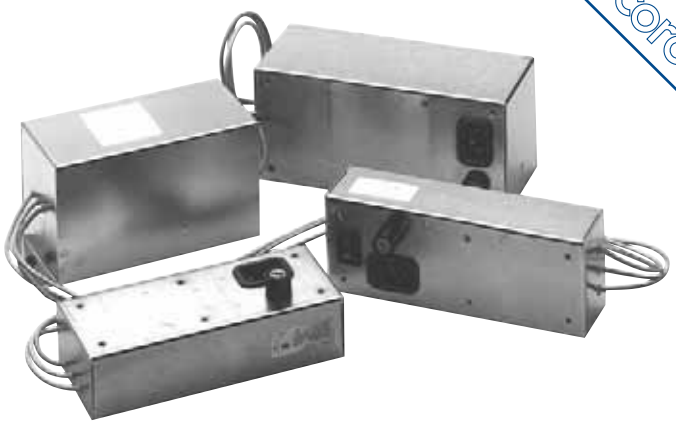
Line Filters for TEMPEST Applications

AQ-Series

- For commercial applications

Tempest-Series

- Standard and custom applications



Type	Max. current	Max. voltage	Max. leakage current line to ground at 250 VAC/50 Hz	Additions
3VAQ3	3 A	250 VAC	2,3 mA	
3VAQ8F	3 A	250 VAC	2,3 mA	IEC connector and fuse holder
3VAQ8FS	3 A	250 VAC	2,3 mA	IEC connector / fuse holder / switch
6VAQ3	6 A	250 VAC	1,2 mA	—
6VAQ8F	6 A	250 VAC	1,2 mA	IEC connector and fuse holder

Electronic computing devices processing confidential informations must be protectet against misuse by unauthorized personnel. The most common standard in this respect is the TEMPEST specification issued by the U.S. Government. The same principle applies to all related equipment in the military, commercial or industrial field processing original or encoded data.

Data, which have not been encoded, can easily be read out by either emission or propagation via power line. Availability of highly sensitive receiving equipment is the only provision necessary. The available methods to prevent this are in principle similar to those being utilized for interference suppression in electronic equipment according to FCC or VDE standards. Radiated interference requires shielding, conducted interference requires line filtering.

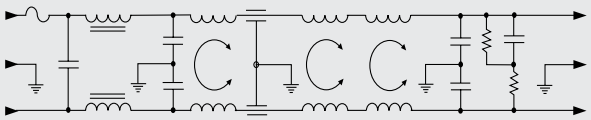
The concepts of power line filters for applications in accordance with TEMPEST specifications and those for common power line interference suppression are of considerable difference. The actual TEMPEST specifications are confidential and the required attenuation factors vary from one device to the next. CORCOM TEMPEST filters provide a very high conformity with the TEMPEST specifications. This is accomplished by a filter design with extremely high attenuation factors over the range from 10 kHz through 1 GHz for common as well as differential mode. Signals exceeding this frequency range are mainly being radiated. Filtering below 10 kHz is commonly unnecessary.

The stated performance features are being accomplished by means of a multi-stage circuit and shielding in extension to a design for the observance of attenuation values in switching power supplies in accordance with VDE level B. The filters are hermetically sealed into metal cases and have been built in accordance with all applicable UL specifications.

These standard filters can directly be used within a variety of applications without creating further design costs. For applications requiring further functions such as switches, power line plugs, fuses etc. different styles can on request easily be accomplished. For further advice we will be glad to be at your service.

Electrical Schematic

3A models



6A models